

3 [(a)] receiving up to a plurality of indications denoting commencement of data
4 packet [frame] transmission over the aggregated link having [on each of] a plurality of virtual
5 links each associated with a particular quality of service level [comprising the aggregated
6 link]; and
7 [(b)] assigning a plurality of pointer values to a corresponding plurality of records
8 in [an] appropriate buffers [ones] of a plurality of pointer value buffers associated with the
9 corresponding plurality of virtual links based, at least in part, on the relative order in which
10 data packets [frames] are transmitted on each of the links.

1 2. (Amended) The method of claim 1, further comprising:

2 [(c)] receiving the transmitted data packets [frames] from each of the plurality of
3 virtual links in a common receive buffer[;].

1 3. (Amended) The method of claim 2, further comprising:

2 [(d)] reading received data packets [frames] from the common receive buffer based,
3 at least in part, on the pointer value assigned in each of the pointer value buffers.

1 4. (Amended) The method of claim 3, wherein [frames] the data packets are
2 promoted from the receive buffer with priority given to pointer [value order] values in pointer
3 value buffers associated with the virtual links having higher quality of service levels.

1 5. (Amended) The method of claim 1, wherein a plurality of pointer value
2 buffers are used to store pointer values denoting the commencement of transmission of data
3 packets [frames] on a corresponding plurality of virtual links supporting a discrete quality of
4 service levels.

1 6. (Amended) The method of claim 1, wherein received data packets [frames]
2 are promoted in pointer value order with priority given to pointer value buffers associated
3 with the virtual links with higher quality of service characteristics.

1 9. (Amended) The method of claim 1, wherein the order of pointer values in
2 each of the pointer value buffers do not correspond to the order of data packet [frame]
3 transmission.

1 ~~Sub~~ 10. (Amended) An apparatus comprising:
2 ~~100~~ a receive buffer having a plurality of records in which to store frames of data received
3 from a plurality of virtual links, each virtual link associated with a particular quality of
4 service level;
5 a plurality of pointer value buffers each associated with at least one of the plurality of
6 virtual links; and
7 a network interface, coupled to the receive buffer and the pointer value buffers, to
8 assign a plurality [plurality] of pointer values to an [in] appropriate buffer [ones] of the
9 plurality of pointer value buffers in response to the commencement [commencement] of
10 transmission of packets of data [frames] on the associated virtual link.

1 14. (Amended) The apparatus of claim 10, wherein the network interface retires
2 the received data packets [frames] from the receive buffer to a system state in order of pointer
3 value in each of the plurality of pointer value buffers.

1 15. (Amended) The apparatus of claim 14, wherein the data packets [frames] are
2 retired in pointer value order for each of the plurality of pointer value buffers, with priority
3 given to pointer value buffers associated with higher quality of service virtual links.

Sub B3/

16. (Amended) In a data network, a method for preserving frame order of a plurality of frames transmitted across a plurality of virtual links of a multi-link trunk, [wherein] each of the virtual links is associated with a discrete quality of service, the method comprising:

(a) receiving up to a plurality of indications denoting commencement of frame transmission on each of the virtual links of the multi-link trunk; and

(b) assigning a plurality of pointer values to a plurality of records corresponding to a number of indications received from each of the virtual links in appropriate ones of a plurality of pointer value buffers associated with the plurality of virtual links based, at least in part, on a relative order in which the indications received.

D3

Please add new claims 21-24 as follows:

Sub B5/

21. (New) An apparatus comprising:

a multi-link trunk including a high-speed link and a low-speed link;

a network interface including

a first pointer value buffer associated with the high-speed link,

a second pointer value buffer associated with the low-speed link,

a receive buffer to promote packets of data in an assigned order of pointer values with priority given to pointer values in the first pointer value buffer.

C1

22. (New) The apparatus of claim 21, wherein the network interface further includes

a multiplexer having an output coupled to the first pointer value buffer, the second pointer value buffer and the receive buffer; and

a plurality of media access controllers coupled to inputs of the multiplexer.

a4

1 23. (New) The apparatus of claim 22, wherein the network interface further
2 includes a plurality of physical links each coupled to a corresponding media access controller
3 of the plurality of media access controllers.

1 24. The apparatus of claim 21, wherein the receive buffer promotes packets of
2 data associated with a pointer value of the second pointer value buffer only if all frames of
3 data associated with a pointer value of the first pointer value buffer has been promoted.
